REFERENCE: ET DOCKET NO. 04-37

- (1) The Amateur Radio Service has a rich tradition of providing critical communications in times of natural disasters when the usual public communication infrastructure, such as wireline telephones, may be disrupted. Experience has shown that cellular telephones also become hopelessly overloaded at such times and are virtually useless. Because of the distributed nature of Amateur Radio communications and because of the widespread independence from the public power grid, the public is well served. National organizations such as the Amateur Radio Emergency Service (ARES) provide a trained pool of operators and equipment that can make a real difference. The increased awareness of Homeland Security shows that the Amateur Radio Service again can make a real difference in times when the usual communications infrastructure is disrupted. Harmful interference from BPL could greatly impair this national resource and prevent it from doing a great public service.
- (2) The FCC's proposed rules changes do not appear to have effectively considered potentially harmful BPL-generated interference to mobile HF radio communications, which are often critical during public service/emergency situations. Mobile HF communications allow amateur radio operators to go to the scene where they can best serve as a vital communications link for emergency responders. Please make certain this important issue is fully evaluated before adopting any final rules changes.
- (3) Amateur radio and other communications services using HF and low-VHF frequencies often involve weak received signals that would likely be totally masked as a result of harmful BPL interference, thereby making communications impossible.
- (4) Many licensed HF and low-VHF services require or use directional antenna arrays in order to sustain effective communications. Suggesting that these antennas could simply be pointed away from overhead power lines (or suggesting the use of other non-directional antennas) to reduce Access BPL-generated interference is not a practical or realistic alternative, and would effectively subordinate these existing services to Access BPL service
- (5) Many federal, state, and local governments, military operations, and licensed private sector individuals and entities now use the 2 MHz to 80 MHz spectrum and these services must be absolutely protected from disruption due to harmful BPL-generated interference. Many of these licensed users have previously expressed to the Commission their concerns about potential BPL interference problems.
- (6) Any changes to Part 15 rules that would establish standards for Access BPL service, and be intended to prevent harmful interference from Access BPL systems, must be based on objective and accurate technical analyses. They must also be supported by valid field tests made under normal operating conditions in areas where other licensed services are co-located. Please make sure you obtain and evaluate the results of several field observations that have already been made by various competent organizations before adopting final rules changes. Decisions of this importance must not be based on presumed, unverified conditions, and must provide for immediate termination of Access BPL-generated interference when it is identified and confirmed. The changes must also ensure absolute, not partial, protection from harmful interference.

- (7) Access BPL systems will use unshielded conductors (i.e., overhead power lines) to transmit broadband data. These power lines clearly represent "antennas" that will radiate RF energy. However, these same conductors will also be capable of receiving RF energy radiated by other currently licensed users of the same HF frequency spectrum, which could disrupt Access BPL service. If that happens, Access BPL service providers might try to assert that these other licensed services should be considered as interfering with their BPL service, which could lead to prolonged and unnecessary legal conflicts. The rules changes must be crafted in such a way as to prohibit judicial resolution of harmful interference claims.
- (8) The nation's electric power transmission systems were neither designed nor intended to be a carrier of broadband data using the 2 MHz to 80 MHz radio frequency spectrum. Thus, it is important that the relative convenience of these systems not result in the unintended consequence of producing harmful interference to other services. Other means of delivering broadband data (such as fiber-optic cable, DSL, and wireless communications) might be more effective and less expensive in many locations, and would not be a potential source of harmful interference.
- (9) Above all, the HF and low-VHF spectrum now used by government agencies, tens of thousands of U.S. amateur radio operators, and many other licensed services must be totally protected from any harmful interference that BPL could cause. Rules changes that would result in existing services having to accept and endure BPL-generated interference simply to accommodate widespread deployment of BPL technology cannot be considered acceptable.

Thanks for the opportunity to comment on the proposed rule.

Sincerely,

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